

**FAIRFAX COUNTY PLANNING COMMISSION
TELECOMMUNICATIONS COMMITTEE
WEDNESDAY, SEPTEMBER 15, 2010**

COMMITTEE MEMBERS PRESENT:

Janet Hall, Mason District
John Litzenberger, Sully District

COMMITTEE MEMBERS ABSENT:

Peter Murphy, Springfield District

OTHER COMMISSIONERS PRESENT:

Walter L. Alcorn, Chairman, At-Large
Frank A. de la Fe, Hunter Mill District
Jay P. Donahue, Dranesville District
Earl Flanagan, Mount Vernon District
Suzanne F. Harsel, Braddock District
James R. Hart, At-Large
James Migliaccio, Lee District
Timothy J. Sargeant, At-Large

FAIRFAX COUNTY STAFF PRESENT:

David Marshall, Planning Division (PD), Department of Planning and Zoning (DPZ)
David Jillson, PD, DPZ
Anita Capps, PD, DPZ
Connie Maier, PD, DPZ
Bob Cordova, Fairfax County Public Schools (FCPS)
Lee Ann Pender, FCPS
Tom Casey, FCPS
Barbara J. Lippa, Executive Director, Planning Commission Office
Linda B. Rodeffer, Clerk to the Planning Commission

OTHERS PRESENT:

Bill Brown, Audubon Society of Northern Virginia
Glenda Booth, Audubon Society of Northern Virginia
Ginger Beaudoin, Bechtel (representing AT&T)
Ed Donohue, Esquire, Donohue and Stearns
Ken Forkas, Milestone Communications
Mary Evans, Collingwood Springs Citizens Association

ATTACHMENTS:

1. 2232 Telecommunication Applications Statistics
2. 2010 Applications Processed By Type
3. Pending Applications
4. Telecommunication Structures at Fairfax County Public School Sites
5. Photographs of Distributed Antenna Systems

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Planning Commission Vice Chairman Walter L. Alcorn constituted the Committee at 7:05 p.m. in the Board Conference Room, at 12000 Government Center Parkway, Fairfax, Virginia, pursuant to Section 4-102 of the Commission's *Bylaws & Procedures* and indicated that the first order of business was to elect a Committee chair.

Vice Chairman Alcorn MOVED TO ELECT JANET R. HALL AS TEMPORARY CHAIRMAN OF THE TELECOMMUNICATIONS COMMITTEE.

Without objection, the motion carried unanimously.

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Temporary Chairman Hall called the meeting to order at 7:06 pm.

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RECENT APPLICATION TRENDS

David Marshall, Planning Division (PD), Department of Planning and Zoning (DPZ), stated that the case volume for telecommunications applications had steadily increased since 1994 with an all time high of 179 applications in 2009, as shown in Attachment 1. He said most likely this number would be exceeded in 2010 since 137 applications had already been filed through August of this year.

He explained that a Telecommunications section had been added to the Comprehensive Plan and Zoning Ordinance in 1992 with a map projecting 24-26 locations throughout the County at buildout. He said due to increasing demand and changing technology, this number had been greatly exceeded and that 1,400 applications had been processed since then.

Referring to Attachment 2, Mr. Marshall said 2010 applications processed to date included:

- 97 "features shown"
- 26 amendments
- 2232/special exception applications
- 12 2232 public hearings.

He said the following applications were pending, as shown in Attachment 3:

- 27 2232 hearings
- 15 2232/special exceptions
- 32 "features shown"
- 6 amendments

Mr. Marshall pointed out that facilities could only be placed in residential areas without public hearings if they were located on publicly-owned properties. He said since there was now an increasing demand for service in residential areas, public hearings and special exception approval were necessary to place them on swim club, church, or fraternal organization sites. He noted that most commercial and industrial sites had already been built out.

Mr. Marshall distributed a list of telecommunications structures at public school sites, Attachment 4. In addition to high schools, he said facilities were also being located at middle and elementary schools on existing light poles or other structures. He noted that a facility at Westfield High School in the Sully District had been approved but had not been erected because the Federal Aviation Administration had issued a negative report.

Responding to a question from Commissioner Alcorn, Mr. Marshall said more applications were subject to public hearings now than in the past and that many applications were deferred by the applicant due to community opposition or other issues that needed to be resolved.

In response to a question from Temporary Chairman Hall, Mr. Marshall said amendments did not require public hearings unless a special exception application approval had conditions limiting the number of antennas and the carrier wanted to increase that number. David Jillson, PD, DPZ, added that two distributed antenna systems (DAS) amendment applications had been subject to the public hearing process.

Commissioner Hart said in some cases special permit approval was needed by the Board of Zoning Appeals (BZA) for facilities on church sites or swimming pools. He said the BZA would prefer that the Planning Commission's public hearing was held first.

Responding to a question from Commissioner Litzenberger, Mr. Marshall said in most cases a structure should be at least 50 feet tall to accommodate antennas.

CURRENT PROCESS AND PROCEDURAL ISSUES

Mr. Marshall stated that due to concerns raised by residents about the impact of facilities on residential communities, the Board of Supervisors had asked the Planning Commission to determine what could be done to improve the process.

Mr. Marshall explained that the demand for facilities was increasing because cells phones were replacing land lines and being used for different forms of communication including Blackberries and text messaging. As a result, he said the following issues frequently arose:

- Health concerns – outside of the purview of the County's review of applications according to the guidelines established by the Federal Communications Commission
- Negative affect on house values – no evidence to support this.
- Alternatives sites – no extensive effort to look at alternate sites; residents often suggest sites that have no merit thus delaying the process.

Mr. Marshall noted that carriers were interested in a quick turnaround in order to meet startup dates often resulting in deficient applications. He said the rapid turnover of carrier contacts also added to the problem.

Commissioner Harsel pointed out that in some cases a carrier might say an alternative site was not an option because its equipment could not be placed there. She also said that it was a good idea to request a strength analysis of poles to ensure additional equipment could be accommodated. She commented that carrier contacts were often not knowledgeable about land use issues.

Commissioner Hart remarked that educating citizens about issues the Planning Commission was required to base its decisions on, through FAQs on the website or other means, would save a lot of time and effort for both parties.

Following discussion, Temporary Chairman Hall suggested that applications contain information for citizens addressing alternate sites and health issues. She said that could eliminate invalid arguments.

Commissioner Litzenberger said electromagnetic radiation charts could be published for reference by the community.

DISTRIBUTED ANTENNA SYSTEMS

Mr. Jillson, PD, DPZ, stated that distributed antenna systems (DAS), an alternative to traditional monopoles, were a network of antenna sites, usually referred to as a network of nodes, placed on replacement roadside utility poles. He said antennas were concealed from view inside cylindrical shaped housing mounted on top of a pole with an equipment cabinet mounted on the pole also. He said existing electric poles were generally replaced with a taller pole and safety requirements required that the antennas be separated from the rest of the pole. Mr. Jillson noted that the Virginia Department of Transportation had minimum clearance requirements and that various national electric codes also had to be met. He said an advantage to DAS was that multiple carriers could use the same antennas. He pointed out that there were presently three installed systems in the County, one currently being installed, and three under review. He said he expected to see more DAS locations in low density residential areas where there were no available structures for collocation. Mr. Jillson explained that this system was not ideal for carriers because the coverage area was smaller and aimed primarily at vehicle traffic.

Mr. Jillson said review of DAS applications was different from that of typical monopole installations because the potential impact was spread over a broader area and balloon tests could not be used to envision what they would look like. He said Attachment 5 showed distribution antennas systems with a seven-foot radome cap on the top of an electrical distribution pole and a candelabra design with cylindrical shells to provide a unified, organized appearance.

Mr. Marshall pointed out that review of DAS applications required considerably more staff time to review than the typical monopole application because each node was treated as a separate site; therefore a large number of property owners had to be notified.

Anita Capps, PD, DPZ, said it was in the best interests of carriers to file a complete application and allow enough time for review. She said localities could not base their decision on health concerns because they were under the purview of the Federal Communications Commission (FCC). However, she said it was incorrect to imply that the FCC did not address health concerns because it set emission standards which carriers had to meet in order to maintain their licenses. Ms. Capps also encouraged carriers to present detailed information about emission areas and to actually test their facilities to demonstrate that they were meeting standards.

Mr. Jillson said it might be worthwhile to request that the FCC review current standards to see if they needed to be updated. Ed Donohue, Esquire, with Donohue and Stearns, responded that the FCC reviewed emission standards regularly which were based on data from the Institute of Electrical and Electronic Engineers, the American National Standards Institute, and the World Health Organization. He said a request for more stringent standards had been declined. Temporary Chairman Hall requested that he send her this information in writing.

Lee Ann Pender, representing Fairfax County Public Schools (FCPS), said that a memorandum would be sent to Planning Commission Chairman Murphy soon reiterating their current process.

Responding to a question from Temporary Chairman Hall, Ms. Pender said that FCPS had received about \$1 million in revenue from telecommunications facilities in FY 2010.

Commissioner Donahue said it would be helpful if a time limit for installation could be set after approval by Planning Commission. He said he had encountered a situation in which an electric company had installed additional equipment on a pole making it unsafe for telecommunications equipment. Mr. Jillson said it sounded reasonable to him but that the pole owner would have to agree.

In response to a question from Commissioner Harsel, Mr. Donohue said the coverage area for a distributed antenna system was a couple of hundred yards depending on topography and tree cover.

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The meeting was adjourned at 8:14 p.m.
Janet R. Hall, Temporary Chairman

An audio recording of this meeting is available in the Planning Commission Office, 12000 Government Center Parkway, Suite 330, Fairfax, Virginia 22035.

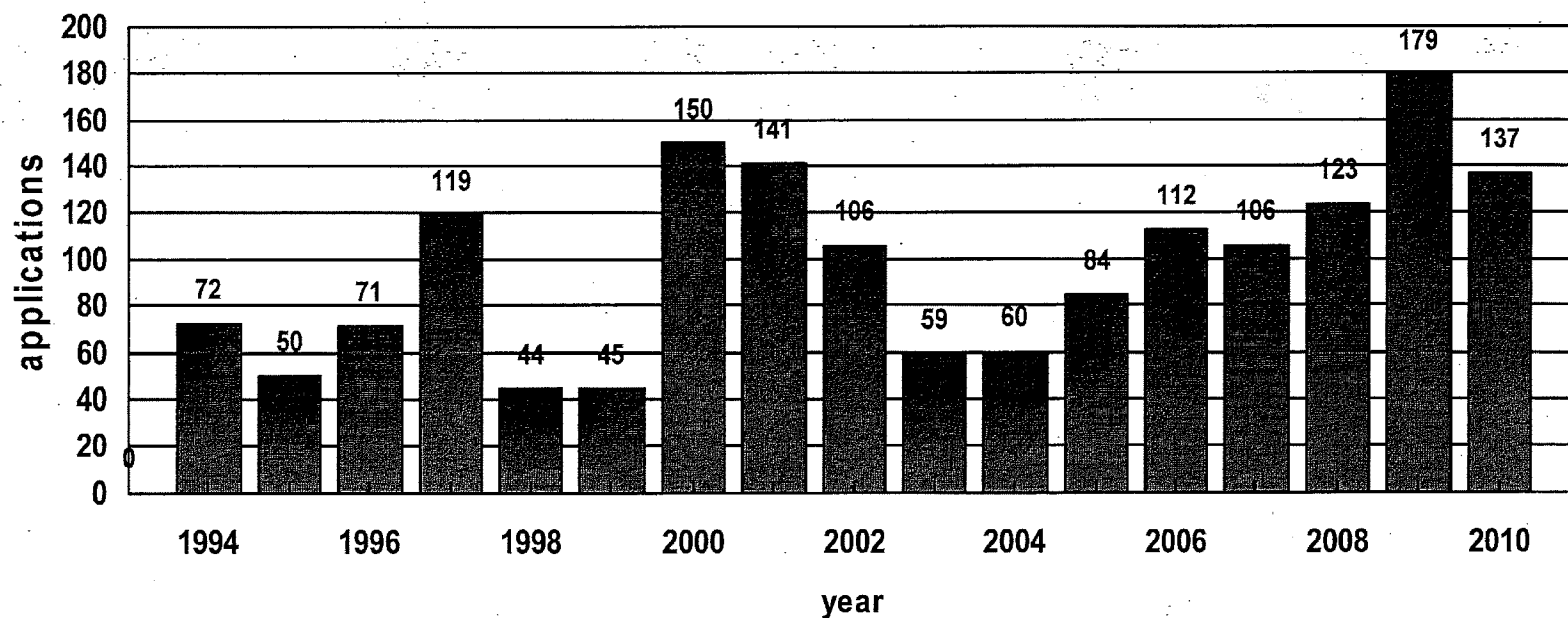
Minutes by: Linda B. Rodeffer

Approved: November 18, 2010

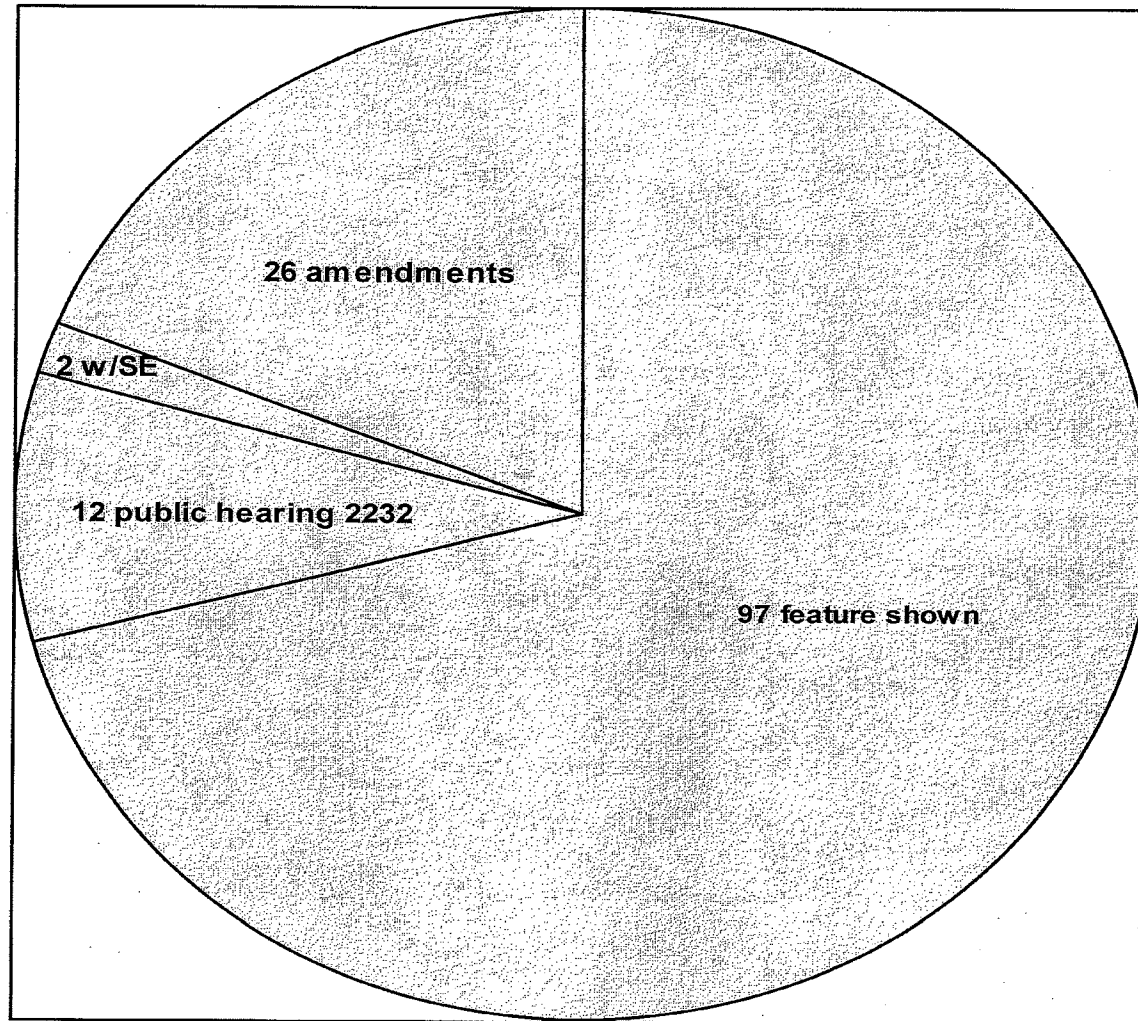
Linda B. Rodeffer, Clerk
Fairfax County Planning Commission

2232 Review Telecommunication Applications Processed by Year

1994 through August 2010



2010 Applications Processed By Type



Pending Applications

2232 Hearing	27
2232 with SE	15
Feature Shown	32
Amendments	6

**TELECOMMUNICATION STRUCTURES
AT FAIRFAX COUNTY PUBLIC SCHOOLS SITES**

SCHOOL SITE	ADDRESS	TAX MAP	AC.	APP. #	PC APPRV.	STRUCTURE
Annandale HS	4700 Medford Dr.	71-1((1))68	30.1	2232-B05-23	02/01/06	110' light pole
Bryant Alternative	2709 Popkins Ln.	93-3((1))3	22.9	2232-V04-8	07/14/04	92' light pole
Carson MS	13618 McLearn Rd.	29-4((1))11A	32.9	2232-Y10-9	06/24/10	125' monopole
Centreville HS (2 nd)	6001 Union Mill Rd.	66-1((1))12A,B	33.4	2232-S09-6	06/25/09	120' light pole
Centreville HS (1 st)				FS-S97-40	07/30/97	125' light pole
Chantilly HS (2 nd)	4201 Stringfellow Rd.	45-1((1))9,9A	35.0	2232-S09-7	09/17/09	125' light pole
Chantilly HS (1 st)				2322-Y00-15	09/28/00	130' light pole
Edison HS	5801 Franconia Rd.	81-4((1))52	43.5	FS-L04-21	04/29/04	97' light pole
Hayfield HS	7606 Telegraph Rd.	91-4((1))28	57.5	FS-L03-41	12/10/03	95' light pole
Langley HS (3 rd)	6520 Georgetown Pk.	22-3((1))10	45.9	FS-D08-111	12/04/08	93' light pole
Langley HS (2 nd)				FS-D96-43	02/13/97	85' light pole
Langley HS (1 st)				FS-51	07/27/95	85' light pole
Lee HS	6540 Franconia Rd.	80-4((1))34-37	30.1	2232-L09-16	11/05/08	125' light pole
Lorton Admin Cen.	8101 Lorton Rd.	107-4 ((1))74	3.7	456-V94-6	12/07/94	170' monopole
McLean HS	1633 Davidson Rd.	30-4((1))19	27.1	FS-D04-19	04/14/04	113' light pole
Oakton HS	2900 Sutton Rd.	48-1((1))111	58.8	2232-P08-16	12/11/08	123' light pole
Robinson HS	5035 Sideburn Rd.	68-4((3))1	78.4	2232-B04-6	07/15/04	125' light pole
So.County HS	8501 Silverbook Rd.	107-4 ((1)) 6	69.7	2232-V09-11	09/17/09	125' light pole
South Lakes HS (2 nd)	11400 South Lakes Dr.	26-2((18))7,8	35.0	2232-H00-39	12/05/01	125' light pole
South Lakes HS (1 st)				FS-H97-35	07/30/97	125' light pole
T. Jefferson HS (1 st)	6560 Braddock Rd.	71-4((1))60	37.9	2232-M09-8	09/24/09	125' light pole
T. Jefferson HS (2 nd)				2232-M00-24	11/29/00	120' light pole
Westgate ES	7500 Margarity Rd.	30-3((1))7B	10.4	2232-P00-22	11/08/00	100' monopole
Woodson HS	9525 Main St.	58-3((1))1	103.7	FS-B96-31	12/12/96	140' monopole
Westfield HS	4700 Stonecroft Blvd.	43-2((1))1	109.2	2232-Y09-18	10/22/09	125' light pole



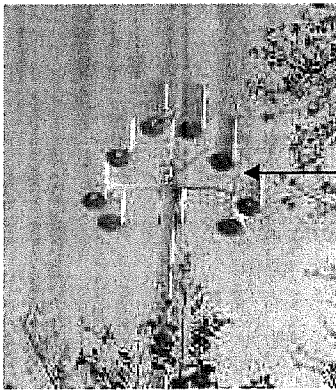
07/14/2010

A 7 foot “radome cap” on the top of an electrical distribution pole conceals the telecommunication antennas.

The equipment box located on the distribution pole or on the ground should be placed and colored to match the pole or screened to blend with its surroundings.



FIGURE 14



Antennas can be of a “candelabra” design and covered with a cylindrical shell to provide a unified, organized appearance.

FIGURE 15